

Bee Campus USA - Central Community College

Report on 2022

Pollinator Habitat Creation & Enhancement

Hastings Garden Installation Hastings Groundskeeping Supervisor, Aaron Theissen, remained ahead of the curve with yet another pollinator garden. The garden features the utilization of 'hill culture' or Hügelkultur in German. This method features the burial of logs beneath the soil in the base of the garden, which over time, will act as a nutrient supplement of sorts for the growing flora. This technique also encourages plant diversity, assists in water retention, and heat conservation during growing seasons. Upcoming blooms will be visible from several vantage points in Hastings, but most noticeably, the Franzen room. Columbus Garden Revamp The conclusion of our Earth Day Celebrations brought Nebraska Statewide Arboretum's Sarah Buckley for another thrilling planting day. The Columbus Pollinator Garden sits atop a hill Just behind the newly renovated Columbus Community Hospital Center for Science and Technology facility. After two years of construction, the garden required supplemental plant replenishment to further enhance and support the budding ecosystem. We had wonderfully helpful student volunteers and club collaborators that joined together to make this event happen. Grand Island Administrative Walkway Pollinator Garden Installation A landscaping change allowed our office to take the lead on revamping the walkway adjacent to many of our administrative offices. ESO staff researched and mapped out the best suited native plants for the area. Plants were locally sourced from the Nebraska Statewide Arboretum. Additional enhancements occurred at the Ord Center Pollinator Garden and included multiple planting days throughout the growing seasons at the Hastings & Grand Island gardens.

How many habitat projects did you help to create or enhance last year?

9

How many total square feet of habitat were created or enhanced?

5534

How many volunteers helped with those projects?

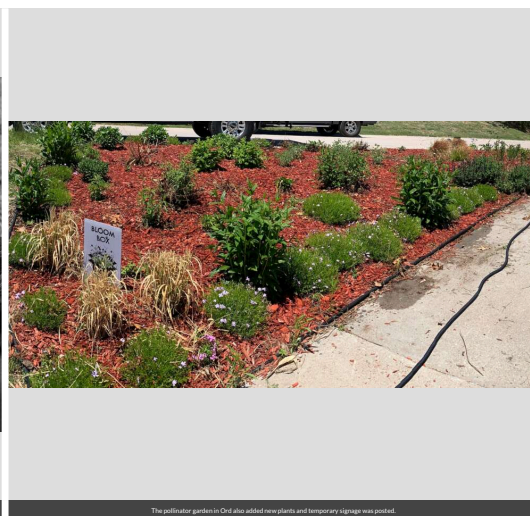
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Please check all that describe the habitats your affiliate helped to create or enhance last year with pollinator benefit in mind.

- Natural area with tree snags and stumps, and bare areas for ground nesting species



Students from the Columbus campus FOCUS (a subgroup of the Student's Sustainability Club) for plant replacement in the pollinator garden.



The pollinator garden in Orléans also added new plants and temporary signage was posted.



Hastings' campus Groundskeeping Supervisor, Aaron Thomsen, and Environmental Sustainability staff worked together to expand pollinator habitat with new native landscaping.

Education & Outreach

In 2022, the Environmental Sustainability Office continued their Sustainability Leadership Presentation Series. A collaboration between multiple organizations and institutions throughout the state, it featured topics ranging from composting, sustainable business, to regenerative agriculture. Additionally, each campus hosted their annual Earth Month event in April. Several sustainability-related organizations were invited to each celebration and provided a booth to share organizational information. Both the Grand Island campus and Kearney Center displayed student's state fair projects focused on pollinator insects and plants. The Hastings campus held a native tree planting in celebration of Arbor Day. The Columbus campus held a hands-on pollinator planting demonstration led by Sarah Buckley of the Nebraska Statewide Arboretum, followed by a composting demo from one of our sustainability interns, Ash Gordon. The Nebraska Children's Groundwater Festival was held at the Grand Island campus in May. Fifth-grade students from around the state participated in classes, pollinator garden tours, and watched demonstrations related to groundwater quality and wildlife education. Staff also built an interactive miniature rain garden utilized for hands-on demonstrations. We also hosted Merit Badge University, where Scouts of America had the opportunity to earn their Sustainability badges, while learning about food waste and the chemical cycles. Students also took in-depth tours of the Pollinator Garden and were taught about native plants and pollinators.

How many pollinator-related events did your affiliate host or help with last year (in total)?

25

How many people attended those events (in total)?

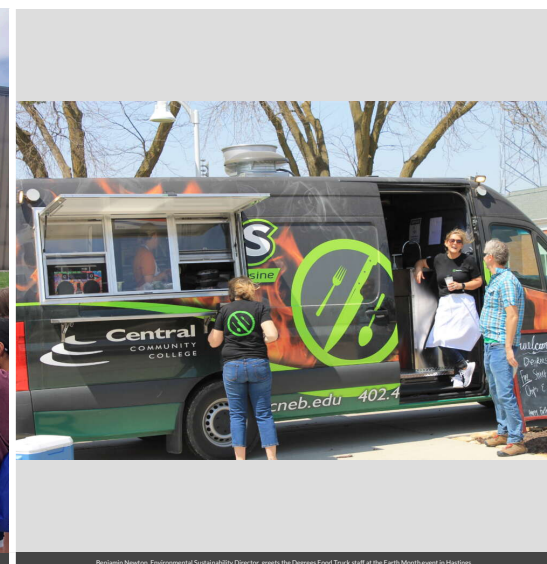
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Environmental Sustainability office staff, Ash Gordon, gives a tour and demonstration to a visitor at the Columbus compost pile.



Environmental Sustainability Office staff demonstrate a water quality experiment in the pollinator garden for students at Nebraska Children's Groundwater Fest.



Benjamin Newton, Environmental Sustainability Director, greets the Degrees Food Truck staff at the Earth Month event in Hastings.

Courses & Continuing Education

Central Community College offers a selection of for-credit and continuing education courses that include a range of pollinator inclusive coursework. Some of these courses include Environmental Science, Biology I & II, Plant Management, and Introduction to Sustainability. Sustainable concepts are a core element in much of the culinary coursework. Students in the hospitality program are guided toward business principles that entail learning about pollinators in relation to food systems, growing and utilizing fresh ingredients, and/or food waste management. Each year, participants of the program are also expected to participate in the culinary garden management process. Public Speaking and English Composition instructors equip students with a range of topics to complete guided writing and speech assignments that afford them more flexible approaches to gaining insight into the lives of pollinators. Additionally, our office strives to furnish all students, regardless of program, extracurricular materials via our website and access to the supplementary e-badging program. While not for credit, students enroll in the program wherein they can obtain a digital accolade for both personal use and it appears on their transcript. The badges requirements are meant to showcase applied knowledge of pollinators outside of traditional coursework. Extended Learning Services grants non-credit course offerings for continued pollinator education including Bee Keeping, Advanced Bee Keeping, Gardening in the Valley, Central Nebraska Regenerative Ag Conference, Falling for Fall, Lavender Farm Tour, Celebrate Spring Gardening. Those who participate in Photography courses also utilize the on-campus pollinator gardens to find interesting photo subjects.

How many of your for-credit courses included pollinator-related information last year?

15

How many students attended those for-credit courses?

2284

How many of your continuing education courses included pollinator-related information last year?

7

How many participants attended those courses?

458



Introduction to Sustainability course is offered to students and covers a wide range of sustainability and pollinator related topics.



The stars of the Beekeeping courses are pictured on a nesting box.

Service-Learning

Central Community College continued their participation in the Nebraska State Fair Sustainability Pavilion this summer, where student projects were placed on exhibit. Staff and students participating in the exhibition shared their knowledge of native plants and pollinators with hundreds of visitors. Projects on display this year included an algae bioreactor, myconoe, planters made from donated burlap coffee bags, and giant pollinator flowers made from repurposed materials. We also provided activities for children, including multiple pollinator-related crafts using recycled materials and pollinator themed games. Prior to this 10-day event, students featured in the exhibition are expected to display models, plans and/or

prototypes at their campus' Earth Month event. In late September, the sustainability office coordinated a planting update by the walkway of the Administration wing in Grand Island. A selection of native Nebraskan plants, shrubs and trees were planted in joint effort between the Nebraska Statewide Arboretum and the Sustainability Office to expand pollinator habitat and create another enjoyable green space. Once the blooms faded, sustainability interns diligently collected seed from our gardens. They assembled seed packets and compiled a research packet about sowing and growing native plants. All funds from the seed sale initiative went directly back to the Students 4 Sustainability club. Members are highly encouraged to learn propagation, seed cleaning, and plant identification to familiarize themselves and others with their newly minted skills.

How many service-learning projects did your campus host and/or support to enhance pollinator habitat on and off-campus?

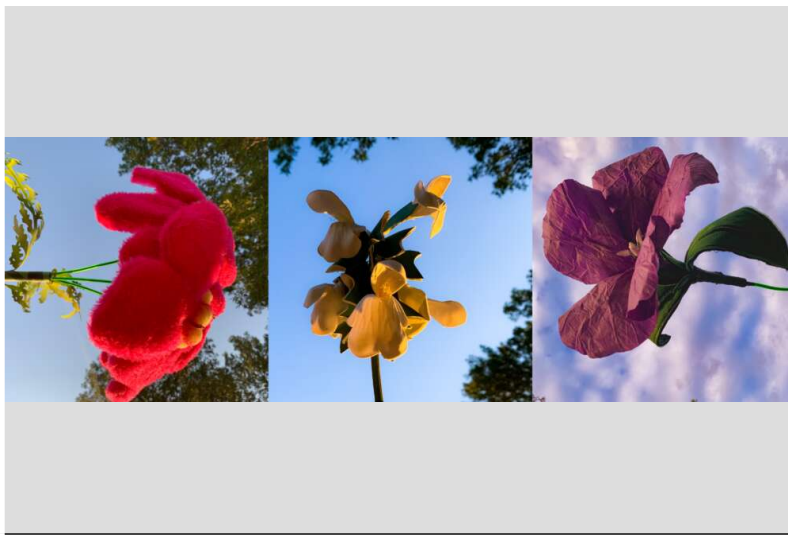
10

How many students participated in service-learning projects last year to enhance pollinator habitat on or off-campus?

43



Aaron Theissen guides staff and students on proper tree planting techniques.



Giant pollinator plants made of reclaimed materials and textiles were used to teach about pollinators.

Educational Signage

A total of five temporary educational pollinator garden signs were posted around the perimeter of Hastings' newest pollinator addition to draw the attention of guests until permanent signage is completed. As mentioned previously in the report, Aaron Theissen, also installed a total of 15 small, permanent, native plant signs in the Student Center Courtyard on the Hastings campus. The Grand Island Garden placed a permanent sign denoting the importance of pollinators. The Columbus garden placed a permanent "Be Aware of Bees" sign near the area where bees are kept. Five, temporary, educational signs were displayed at the Nebraska State Fair, and later added to our outdoor garden boards. Finally, the

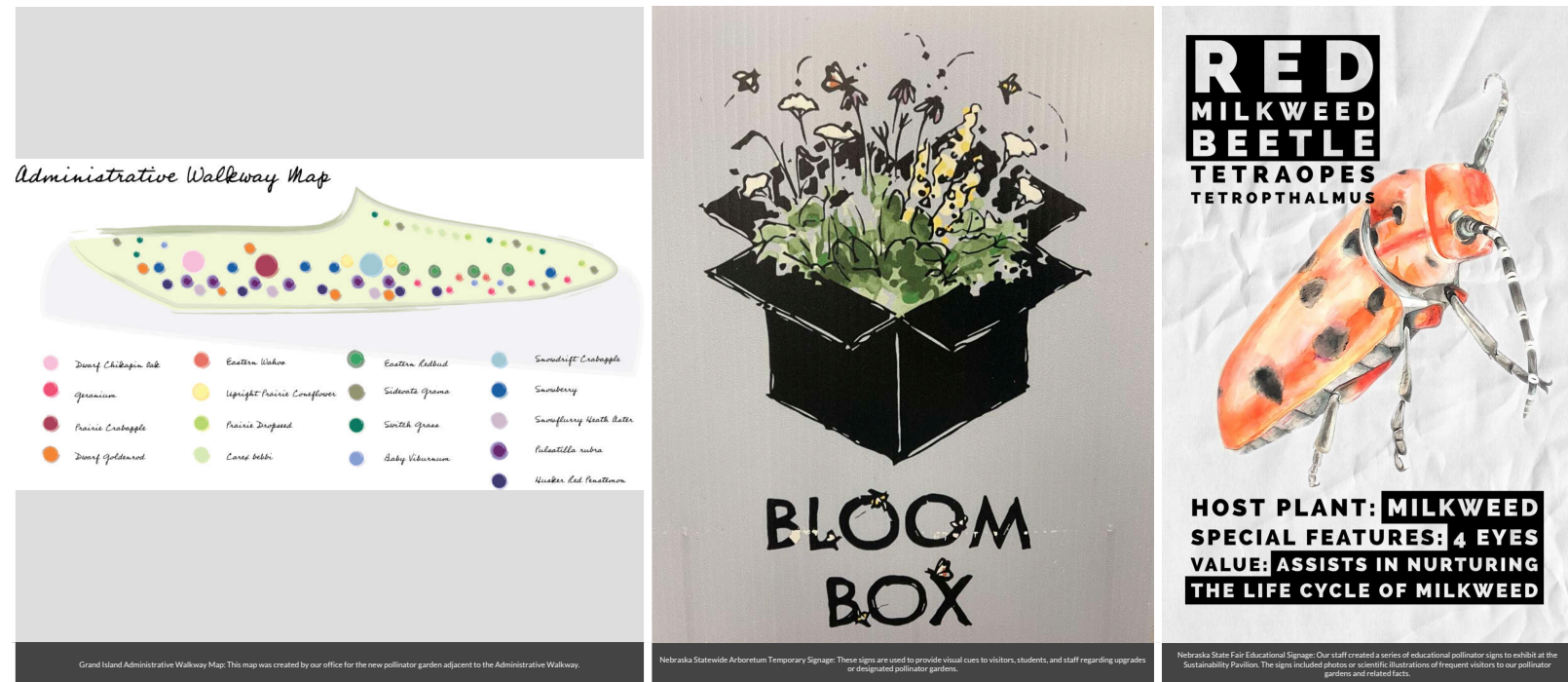
garden in Ord installed one temporary sign to indicate the garden was expanded using Bloom Box. Permanent messenger board with garden signage was also placed in this garden.

Number of permanent interpretive/educational/Bee Campus USA signs installed to date?

19

Number of temporary interpretive/educational/Bee Campus USA signs installed last year?

11



Policies & Practices

Groundskeeping from all centers and campuses have been working to implement policies and practices to use more native plants, less broad spectrum pesticides, and more biopesticides. The Hastings Campus Groundskeeping Supervisor Aaron Theissen has changed the procedure for plant selection to choosing native plants whenever and wherever possible. Along with this commitment, he has been proactive in lessening the impact of pesticides through biopesticide applications, including mosquito dunks. Signage was added to label native plants visible in the Student Center courtyard. Kim Garretson from the Columbus campus also began working with vendors to source native plants in new landscaping projects first. The Columbus pollinator garden was also awarded Nebraska Statewide Arboretum funding to expand the number of native Nebraska plants. Student staff from the Columbus campus had a short training on the difference between pollinator plants and weeds. Grand Island campus eliminated pesticide usage in designated pollinator areas. The Environmental

Sustainability office staff have been trained in the difference between pollinator plants and weeds in our gardens, and they also train other staff and students. Also, the sustainability office staff hand picks Japanese beetles and places them in soapy water, rather than use any biopesticides in our pollinator gardens. Ord does not use pesticides at all in the pollinator garden near the hike and bike trail.

What actions have you taken to make pest management practices more pollinator-friendly?

- Avoided use of pesticides in public sites containing designated pollinator habitat or other sensitive features (except when targeted use is deemed the best option for invasive or noxious weed, insect or disease management)
- Implemented non-chemical pest prevention and management methods on city or campus grounds
- Eliminated pesticide uses that are solely to maintain aesthetics on city or campus grounds
- Reduced the total area of city or campus-managed lands to which pesticides are applied
- Restricted pesticides used to organic pesticides on city or campus grounds
- Sourced plants for city or campus grounds using “Buying Bee-Safe Plants” methods recommended by Xerces Society. (See <https://xerces.org/publications/fact-sheets/buying-bee-safe-plants>)
- Sourced plants for city or campus grounds that were not treated with neonicotinoids

In your city or campus, are any policy initiatives underway to further protect pollinators, people or waterways from pesticides?

Central Community College been proactive in lessening the impact of pesticides through biopesticide applications, including mosquito dunks. Two campuses and centers have eliminated pesticide usage in designated pollinator areas. Also, the sustainability office staff hand picks Japanese beetles and places them in soapy water, rather than use any biopesticides in our pollinator gardens. Ord does not use pesticides at all in the pollinator garden near a small water way.

Please describe actions by your affiliate to attend training on ecologically-based Integrated Pest Management and/or to review IPM plans and programs considered of high quality by Bee City USA?

During our tree planting events in Hastings, groundskeeping staff shared information about targeted pest management techniques. They also hosted an Emerald Ash Borer targeted pest management workshop for students, staff and the community. Groundskeeping staff are continually looking for alternatives and solutions to eliminate or reduce pesticide usage. The Environmental Sustainability office staff also hand picks Japanese beetles from our pollinator gardens and places them in soapy water.

Integrated Pest Management Plan:

[http://Each%20campus%20maintains%20a%20written%20IPM%20plan%20which%20includes%20the%20avoidance%20of%20pesticides%20in%20designated%20pollinator%20habitats%20and%20other%20sensitive%20sites%20\(except%20when%20targeted%20herbicide%20use%20is%20deemed%20the%20best%20option%20for%20invasive%20or%20noxious%20weed%20management%20like%20circumstances%20listed%20above\).%20The%20Grand%20Island%20campus%20continues%20to%20utilize%20non-chemical%20pest%20prevention%20and%20management%20methods.%20Each%20campus%20has%20eliminated%20pesticide%20uses%20that%20are%20solely%20to%20maintain%20aesthetics%20and%20reduced%20the%20number%20of%20sites%20where%20pesticides%20are%20used.%20Additionally,%20we%20have%20continued%20to%20further%20restricted%20the%20pesticides%20used%20to%20organic%20pesticides%20and%20dropped%20pesticide%20use%20altogether%20where%20possible.%20](http://Each%20campus%20maintains%20a%20written%20IPM%20plan%20which%20includes%20the%20avoidance%20of%20pesticides%20in%20designated%20pollinator%20habitats%20and%20other%20sensitive%20sites%20(except%20when%20targeted%20herbicide%20use%20is%20deemed%20the%20best%20option%20for%20invasive%20or%20noxious%20weed%20management%20like%20circumstances%20listed%20above).%20The%20Grand%20Island%20campus%20continues%20to%20utilize%20non-chemical%20pest%20prevention%20and%20management%20methods.%20Each%20campus%20has%20eliminated%20pesticide%20uses%20that%20are%20solely%20to%20maintain%20aesthetics%20and%20reduced%20the%20number%20of%20sites%20where%20pesticides%20are%20used.%20Additionally,%20we%20have%20continued%20to%20further%20restricted%20the%20pesticides%20used%20to%20organic%20pesticides%20and%20dropped%20pesticide%20use%20altogether%20where%20possible.%20)

Recommended Native Plant List: [Plant list.docx](#)

https://plantnebraska.org/file_download/inline/c9385c9d-c453-4e9e-ad39-f0d766ed4810

Recommended Native Plant Supplier List:

<https://plantnebraska.org/store/>



Native plants, pictured above, are the first choice for new landscaping projects.

Learn More



The Nebraska Statewide Arboretum issued Central Community College the Community Landscape Award for each of our Columbus, Grand Island, Hastings campuses, and the Ord Center.